

A. AMENDMENTS TO CLAIMS

Please cancel Claim 23 and amend the claims as indicated hereinafter.

1. (CURRENTLY AMENDED) A wireless communications apparatus comprising:
a first antenna arrangement configured to transmit and receive communications signals on a first communications channel within a first section of a spatial area around the wireless communications apparatus, wherein the first antenna arrangement is further configured to determine whether the first communications channel is currently being used to carry communication signals before transmitting any communication signals onto the first communications ~~channel~~; channel, wherein the first antenna arrangement is further configured to selectively and separately manage transmit power levels with wireless devices in the first section of the spatial area around the wireless communications apparatus on a per-wireless device basis; and
a second antenna arrangement configured to transmit and receive communications signals on a second communications channel within a second section of the spatial area around the wireless communications apparatus, wherein the second antenna arrangement is further configured to determine whether the second communications channel is currently being used to carry communication signals before transmitting any communication signals onto the second communications ~~channel~~; channel, wherein the second antenna arrangement is further configured to selectively and separately manage transmit power levels with wireless devices in the second section of the spatial area around the wireless communications apparatus on a per-wireless device basis.
2. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first and second sections of the spatial area around the wireless communications apparatus do not overlap and are not adjacent to each other.

3. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first and second sections of the spatial area around the wireless communications apparatus are adjacent to each other.
4. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first and second sections of the spatial area around the wireless communications apparatus are different sizes.
5. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first antenna arrangement is further configured to transmit and receive communications signals on a third communications channel within the first section of the spatial area around the wireless communications apparatus, wherein the third communications channel is on a different frequency within the same frequency band as the first communications channel.
6. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first antenna arrangement is further configured to transmit and receive communications signals on a third communications channel within the first section of the spatial area around the wireless communications apparatus, wherein the third communications channel is in a different frequency band than the first communications channel.
7. (ORIGINAL) The wireless communications apparatus as recited in Claim 6, wherein the first communications channel is in the IEEE 802.11(a) frequency band and the third communications channel is in the IEEE 802.11(b) frequency band.
8. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first antenna arrangement is further configured to transmit and receive communications signals on the first communications channel using a time division multiple access communications protocol.

9. (ORIGINAL) The wireless communications apparatus as recited in Claim 8, wherein a carrier sense mechanism is used to select the first and second communications channels.
10. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first antenna arrangement is further configured to determine whether the first communications channel is currently being used to carry communication signals before transmitting any communication signals onto the first communications channel using a carrier sense mechanism.
11. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the wireless communications apparatus is a wireless access point communicatively coupled to a wired network.
12. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first antenna arrangement and the second antenna arrangement are configured to allow simultaneous separate communications on the first and second communications channels.
13. (ORIGINAL) The wireless communications apparatus as recited in Claim 12, wherein the first and second communications channels are the same frequency.
14. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first and second antenna arrangements are configured with different polarization orientations.
15. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first and second communications channels are selected to reduce interference between the first and second sections.
16. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the first and second antenna arrangements are configured to reduce interference between the first and second sections.

17. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the wireless communications apparatus is configured to dynamically change the size of the first section.
18. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, further comprising a manager mechanism configured to aggregate data received from the first and second antenna arrangements.
19. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, further comprising a manager mechanism configured to, in response to a wireless device moving from the first section into the second section, updating and storing data that indicates that communications with the wireless device are now to be performed using the second antenna arrangement.
20. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, further comprising a switch configured to provide for the switching of data between the first and second antenna arrangements.
21. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, further comprising a switch configured to provide for the switching of data between the first antenna arrangement and a network.
22. (ORIGINAL) The wireless communications apparatus as recited in Claim 1, wherein the wireless communications apparatus is configured to selectively and separately manage transmit power levels and receive sensitivities for the first and second antenna arrangements.
23. (CANCELED)
24. (CURRENTLY AMENDED) A wireless access point for providing wireless access to a wired network within a building, the wireless access point comprising:

a first antenna arrangement configured to communicate with wireless devices within a first section of a spatial area around the wireless access point, wherein the first antenna arrangement is further configured to determine whether a first communications channel assigned to the first section of the spatial area is currently being used to carry communication signals before transmitting any communication signals onto the first communications ~~channel~~; channel, wherein the first antenna arrangement is further configured to selectively and separately manage transmit power levels with the wireless devices in the first section of the spatial area around the wireless communications apparatus on a per-wireless device basis;

a second antenna arrangement configured to communicate with wireless devices within a second section of the spatial area around the wireless access point, wherein the second antenna arrangement is further configured to determine whether a second communications channel assigned to the second section of the spatial area is currently being used to carry communication signals before transmitting any communication signals onto the second communications ~~channel~~; channel, wherein the second antenna arrangement is further configured to selectively and separately manage transmit power levels with the wireless devices in the second section of the spatial area around the wireless communications apparatus on a per-wireless device basis; and

a management mechanism configured to manage the operation of the first and second antenna arrangements and to manage the exchange of data between wireless devices in the first and second sections of the spatial area and the wired network in the building.

25. – 36. (CANCELED)

37. (CURRENTLY AMENDED) A wireless communications system comprising:
a first antenna arrangement having a first transceiver configured to transmit and receive communications signals on a communications channel within a first section of a spatial area around the wireless communications ~~system~~; system, wherein the first

antenna arrangement is configured to selectively and separately manage transmit power levels with wireless devices in the first section of the spatial area around the wireless communications system on a per-wireless device basis;

a second antenna arrangement having a second transceiver configured to transmit and receive communications signals on the communications channel within a second section of the spatial area around the wireless communications ~~system;~~ system, wherein the second antenna arrangement is configured to selectively and separately manage transmit power levels with wireless devices in the second section of the spatial area around the wireless communications system on a per-wireless device basis; and

wherein a carrier sense multiple access, collision avoidance algorithm based on carrier sense or energy detect, or a point coordinating function is used to allow communications on the communications channel in both the first and second sections to occur.

38. (PREVIOUSLY PRESENTED) The wireless communications apparatus as recited in Claim 37, further comprising a network manager configured to control the transfer of data between the first and second sections and a network.